



Stage Gate Process, Testing, and Evaluation

C1 Breakout Session Report-Out

**Solar America Initiative
Technical Exchange Meeting
April 17, 2006**



Stage Gate

- Belief in possibility of meeting LCOE goals.
- General agreement that having Stage Gate review is the right way to go. It is a normal part of project management.
- Need the option to re-plan the Stage-Gate agreements (both timing and direction) midway through the projects, as research reveals new directions.
- To reach goals, there will be parallel revolutionary and evolutionary efforts. Need flexibility to down-select some things on their own both in research and manufacturing processes—i.e., internal go/no-go decisions.



Testing and Evaluation

- DOE is stepping up to do a lot of work, and should be a partner with the teams.
- Recommend that as partners, DOE assign contract manager to each contract so collaborative relationship and understanding of progress develops. There should be consistent set of people assigned to review the project. Have manager for these contracts work as a “board member”.
- Has there been an evaluation of resources needed to perform this work? Overload? Ability to meet schedules?
- DOE needs to be flexible to evaluate vastly different proposals, using common assumptions.



Testing and Evaluation

- Don't be too prescriptive. Allow applicants to respond to overall goals with a range of approaches and technologies. Give the applicants to flexibility to propose the Testing and Evaluation they will use.
- It's the Prime's job to put forth a proposal that is compelling and convincing. Collaboration is needed to meet the goals, and we need to find the right teams to meet them.
- LCOE goals are aggressive and will drive people together to shorten the cycle time. Will be complementary to individual research that DOE has been doing on new technologies, which should continue as well.



Testing and Evaluation

- DOE program should accommodate both the evolutionary and revolutionary work. There will be a small number of winners, and we need a way to continue supporting the smaller, revolutionary concepts.
- In danger of shutting out some key players with vertical integration. The program should explicitly fund some proposals that don't include vertical integration. There are some building blocks where vertical integration would be a distraction. Un-bundle the level of integration. Be clear if this is an acceptable strategy.
- Consumers are not driven only by cost. However, general agreement that affordability – i.e., cost is a driver. Individuals may want other qualities, but affordability is important.
- Applicants should propose the test and evaluation approach they intend to use, involving either the labs or other testing and evaluation entities that can validate / verify results. Product certification will necessarily involve certification organizations necessary for product sales. FOA needs to make this clear.
- An explanation of Lab roles and how university and other T&E capabilities are accessed and paid for is needed. Make provisions so that third-party testing does not rely only on NREL and Sandia.



Testing and Evaluation

- How will cost structure be evaluated? Where is the expertise? Abilities of the evaluation teams are very important. Expertise and confidentiality are critical. DOE needs to protect confidentiality. Perhaps look at how ATP has done this in the past.
- Need a way to evaluate a large number of assumptions and equalize them for comparable evaluations.
- To reach these aggressive goals, need next generation technology. Are we going to develop test protocols for next generation technology?
- Part of the evaluation should be acceptability of proposed testing and evaluation protocols. There won't be a protocol that works for everyone. Don't be prescriptive.
- Be clear about the program goal (LCOE/volume). The market will determine the price that will be set. Must demonstrate capability to produce electricity at cost goals, though can set the price depending on the market.
- In submitting application, need to provide verifiable current benchmarks, and show the roadmap for reaching the program goal.